

## REMARKS

Claims 6-8 stand rejected under § 102(e) on the basis of Whittlestone et al. '596 or Silver et al. '847. Applicants respectfully traverse these rejections because neither reference discloses (or suggests) (1) a motor that moves a diaphragm through threaded engagement that translates motor rotation into diaphragm oscillation, as in amended claim 6, (2) an air pump motor having a shaft that moves axially, as in claim 7, or (3) a rotating shaft in an air pump motor that is in threaded engagement with a diaphragm, as in claim 8.

Both Silver et al. and Whittlestone disclose diaphragm pumps that translate rotational movement of a motor shaft to reciprocating movement of a diaphragm with a cam. This type of mechanical linkage is large and cumbersome, as seen in the drawings of the references.

The present invention eliminates the need for the cam linkages disclosed in the references by moving the diaphragm as defined in claims 6-8. In one embodiment of the invention, for example, threaded engagement of a shaft 18 in a nut 120 causes the rotating shaft 118 to move axially as it rotates, moving the diaphragm back and forth in the process. Claims 6-8 define this invention in various ways. This concept is neither disclosed nor suggested by either of the cited references, alone or in combination. Reconsideration and withdrawal of these rejections is respectfully requested.

Claims 10-13 stand rejected under § 103 on the basis of Whittlestone et al. and Williams et al. Applicants traverse this rejection for the following reasons. Claim 10

defines a hollow boss not disclosed or suggested by the references, and claims 11 and 12 depend from claim 10. Applicants believe that this feature is patentable.

Claim 13 defines a liner that is sealed by press-fit connections on both ends.

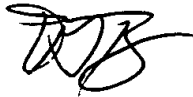
An example of the press-fit connections can be seen in Fig. 6, where an end 63 is secured in a groove 64 at one end of a liner 58, and an end 66 is inserted in a groove 70 at the other end of the liner. The liner in Whittlestone does not have such press-fit connections, and Williams et al. does not appear to disclose a liner. Accordingly, withdrawal of this rejection is also requested.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By



Patrick G. Burns  
Registration No. 29,367

April 15, 2003

300 South Wacker Drive  
Suite 2500  
Chicago, Illinois 60606  
Telephone: 312.360.0080  
Facsimile: 312.360.9315  
F:\Data\WP60\0414\63308\Amend C.DOC